

WEST Search History

DATE: Tuesday, October 07, 2003

| <u>Set Name</u> | <u>Query</u> | <u>Hit Count</u> | <u>Set Name</u> |
|---------------------------------|----------------------------------|------------------|-----------------|
| side by side | | | result set |
| <i>DB=USPT; PLUR=YES; OP=OR</i> | | | |
| L5 | L3 and l4 | 18 | L5 |
| L4 | (germ cell or sperm) and muta\$7 | 44712 | L4 |
| L3 | L2 and zebrafish | 18 | L3 |
| L2 | L1 and muta\$7 | 919 | L2 |
| L1 | psoralen | 1611 | L1 |

END OF SEARCH HISTORY

FILE 'HOME' ENTERED AT 13:54:49 ON 07 OCT 2003

| => file medline biosis embase scisearch caplus agricola | SINCE FILE | TOTAL |
|---|------------|---------|
| COST IN U.S. DOLLARS | ENTRY | SESSION |
| FULL ESTIMATED COST | 0.21 | 0.21 |

FILE 'MEDLINE' ENTERED AT 13:55:06 ON 07 OCT 2003

FILE 'BIOSIS' ENTERED AT 13:55:06 ON 07 OCT 2003
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FILE 'EMBASE' ENTERED AT 13:55:06 ON 07 OCT 2003
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FILE 'SCISEARCH' ENTERED AT 13:55:06 ON 07 OCT 2003
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FILE 'CAPLUS' ENTERED AT 13:55:06 ON 07 OCT 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE 'AGRICOLA' ENTERED AT 13:55:06 ON 07 OCT 2003

=> s psoralen
L1 15246 PSORALEN

=> s l1 and muta?
L2 1732 L1 AND MUTA?

=> s l2 and sperm
L3 6 L2 AND SPERM

=> s l2 and germ cell
L4 1 L2 AND GERM CELL

=> s l2 and zebrafish
L5 0 L2 AND ZEBRAFISH

=> s l1 and sperm
L6 28 L1 AND SPERM

=> s l1 and germ cell
L7 2 L1 AND GERM CELL

=> dup rem
ENTER L# LIST OR (END):16
PROCESSING COMPLETED FOR L6
L8 17 DUP REM L6 (11 DUPLICATES REMOVED)

=> s l8 and py <= 1998
2 FILES SEARCHED...
4 FILES SEARCHED...
L9 15 L8 AND PY <= 1998

=> d l9 tot ibib abs

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * *
 SESSION RESUMED IN FILE 'MEDLINE, BIOSIS, EMBASE, SCISEARCH, CAPLUS, AGRICOLA'
 AT 14:10:36 ON 07 OCT 2003
 FILE 'MEDLINE' ENTERED AT 14:10:36 ON 07 OCT 2003
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 FILE 'AGRICOLA' ENTERED AT 14:10:36 ON 07 OCT 2003

| | | |
|--|------------|---------|
| COST IN U.S. DOLLARS | SINCE FILE | TOTAL |
| | ENTRY | SESSION |
| FULL ESTIMATED COST | 53.04 | 53.25 |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL |
| | ENTRY | SESSION |
| CA SUBSCRIBER PRICE | -3.91 | -3.91 |

=> s zebrafish
 L10 20285 ZEBRAFISH

=> s 10 and muta?
 L11 216920 10 AND MUTA?

=> s l10 and muta?
 L12 5742 L10 AND MUTA?

=> s l12 and sperm
 L13 35 L12 AND SPERM

=> d l13 and py <= 1998
 'AND' IS NOT A VALID FORMAT
 In a multifile environment, a format can only be used if it is valid
 in at least one of the files. Refer to file specific help messages
 or the STNGUIDE file for information on formats available in
 individual files.

REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):
 REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):

REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):

REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):n
 'N' IS NOT A VALID FORMAT
 In a multifile environment, a format can only be used if it is valid
 in at least one of the files. Refer to file specific help messages
 or the STNGUIDE file for information on formats available in
 individual files.

REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):ti
 UNITS CONVERSION IS NOT AVAILABLE IN THE CURRENT FILE

=> s l13 and py <= 1998
 2 FILES SEARCHED...
 4 FILES SEARCHED...
 L14 14 L13 AND PY <= 1998

=> dup rem
 ENTER L# LIST OR (END):l14
 PROCESSING COMPLETED FOR L14
 L15 6 DUP REM L14 (8 DUPLICATES REMOVED)

=> d 115 tot ibib abs

L9 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1985:520450 CAPLUS

DOCUMENT NUMBER: 103:120450

TITLE: Use of a **psoralen**-induced phenocopy to study genes controlling spermatogenesis in *Caenorhabditis elegans*

AUTHOR(S): Edgar, Lois Glass; Hirsh, David

CORPORATE SOURCE: Dep. Mol., Cell. Dev. Biol., Univ. Colorado, Boulder, CO, 80309, USA

SOURCE: Developmental Biology (Orlando, FL, United States) (1985), 111(1), 108-18

CODEN: DEBIAO; ISSN: 0012-1606

DOCUMENT TYPE: Journal

LANGUAGE: English

AB In the nematode *C. elegans*, spermatogenesis represents 1 of 2 alternative developmental pathways open to premeiotic germ cells. At least 2 genes, *fem-1* and *fem-2*, control the initiation of spermatogenesis in XX (hermaphrodite) worms, and the entire spectrum of male differentiation in XO animals. Low-dose irradiation of worms treated with the light-activated DNA-crosslinking drug trimethylpsoralen, at levels that do not affect cell division or growth rates, blocks spermatogenesis in *C. elegans* hermaphrodites and produces an identical phenotype to that of temperature-sensitive mutations in the *fem* genes. **Psoralen** treatment does not, however, produce corresponding phenotypes of these mutants in XO animals. The developmental age for phenocopy production is the same as the hermaphrodite temperature-sensitive period of the 2 mutants. The effects of pulses of restrictive temperature and **psoralen** treatment on *fem-2* mutant hermaphrodites are additive, suggesting that **psoralen** crosslinking may reduce the level of the *fem-2* gene product. Microbeam experiments localize the target for the **psoralen** effect to the primary germ cells in the 1st-stage larvae, indicating that a critical step occurs in a small number of precursor cells prior to their commitment to spermatogenesis